

**Abstract.** *Electronic commerce challenges personas companies to design electronic system to increase interaction which leads to retain customers and increase sales. This exploratory study examines the correlation between lifestyle and emphasis on contents of website in personas industry. The study finds that market segment of lifestyle can be divided into four groups: 'opinion leader', 'opinion follower', 'conservative' and 'challenger'. This paper tries to suggest a checklist to a vendor. We conclude that AIO can be a base of market segment in personas industry. We suggest some important factors which are included of the customized services, the safety of use factors, the store information and the menu illustration. Finally, we also conclude that the first three important factors of websites have significant influences on market segments of personas industry except for the store information factor.*

**Keywords:** AIO, market segmentation, personas industry.

## **LIFE-STYLE ORIENTATION AND CONTENTS OF WEBSITES IN PERSONAS INDUSTRY**

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## **1. Introduction**

The most common and widely spread means of e-commerce and e-business are as follows: e-shop, e-mail, e-procurement, e-auction, virtual communities, e-service providing, 3rd party marketplace and so on (Kovacs, 2007; Racolta-Paina, Luca, 2010). According to a survey, the population of users has grown to 23 million on Internet until Jun. 2011 in Taiwan and penetration (% population) is 70% (Internet World Stats, 2011), therefore, the development of e-commerce become a agenda to a vender. On the other hand, on-line shopping becomes a new channel of distribution for business to growing population on Internet, thus, electronic commerce challenges personas companies to design electronic system to increase interaction which leads to retain customers and increase sales. Furthermore, the history of development of a portal site is starting from a information provider and moves into provision of multi-functions service to members such as web server space, email space etc. (Cohan, 1999). Customers are easy to switch to a competitor in the environment of internet by click the mouse (Reichheld and Schefter 2000; Yao and Liao, 2011), nevertheless, Rosenberg and Czepiel (1984) suggest costs of develop a new customer is six times greater than retains an old customer. In order to build customer loyalty, venders should evaluate contents of a website in term of service quality which leads to better satisfaction in return.

In particular, large number of dual income families in Taiwan has increasing through the years as result of no time in preparing meals for their family, thus the food delivery market has the opportunity to penetrate sales for this trend. Consumers to purchase food and service is not only pursuing taste and sanitation but also selection on better location, interior design and convenience of parking etc. On the delivery market, there are number of factors influence the scale of market including of dual-income family, family cycle, numbers of family, single-mined person, careers etc., as a result, these characteristics will raise the need for delivery food (Luk, Schafer and Keith 1999; Jang et al., 2004). The purpose of this study: 1) This paper tries to suggest a checklist to a vendor on how are consumers of personas market can be treated differently into different segments? 2) What are those contents of website attracting to segments of the personas industry?

## **2. Literature review**

### **2.1. Personas industry on Internet**

According to National Statistics of Taiwan (2001), personas industry is classified as Category G - Eating and Drinking Places which includes restaurants, coffee/tea shops and bars, public house and beer halls, a lunch box, pizzas and hamburgers, other food delivery stores.

Internet marketing is a powerful tool for business to expand this market, such as site search feature, internal search engine, hierarchical classification and intelligent agents, which gave Web's customers a high level of control and convenience (Greenwald and Leavitt, 1984; Baty and Lee, 1995; Racolta-Paina, Luca, 2010). In a survey by Internet World, 89 percent of 163 leading Webs design firms said that they used a search mechanism to lengthen and enhance their users' experience (Gardner, 1998), therefore, personas business will also introduce food and service to consumers via internet.

A study conducted by Ruble and Leech (2002) chose a small, random sample of Virginia-based Internet personas vendors; sixteen websites were evaluated on pre-consumer information prior to making the purchase. They also examined on the actual ordering of the products, including the transaction, confirmation of the order and receipt of the goods. Lastly, they evaluated on the return of the goods which might cause vendors selling the personas items to experience monetary losses. Because the sample size of the study was small, future research should be conducted on a larger sample of Virginia-based personas websites to compare consistency with their study (Chase and Leech, 2003).

## **2.2. Market Segmentation**

The concept of Life style first applied to marketing field and raised by Lazer and Williams in 1963 due to limit uses on demographical factors which depict narrow profile on consumer behaviors. The advantages of Life style are to better portray characteristics of physical and multidimensional factors compared to demographical factors, which will lead to better understanding of consumers. Life style is a systematic concept which represents the common characteristics of behaviors among a group of people in a society (Lazer and Williams, 1963). Life style is also to treat consumer as a whole rather than pieces (Plummer, 1974), it represents ways of life on spending and time management of people (Engle, Kollat and Blackwell, 1982). In particular, life style exhibits on activities, interests and opinions (AIO) of people (Kotler, 1997). Although, there are total 32 different definitions of life style according to Well's study in 1971, these definitions share common features on rich information, quantitatively measurement not qualitatively on information and verbalized described in general rather than in professional jargons. However, this study focuses on modern definitions of AIO in life style by Kotler in 1997. Engle et al in 1982 suggest that individual's life style is strongly influenced by surrounding of a society, for example, families, reference group, social classes and cultural factors (Goeldner and Ritchie, 2003), Johns and Gyimothy, 2002; Kotler et al., 2003; Yao and Liao, 2011).

The reasons for some researchers propose methods of measurement in life style five categories. Firstly, some scholars try to measure it from consumption of good and services. Secondly, some measure it according to values of consumers. Thirdly, they measure self-values and personality. Fourthly, they measure consumers' attitude toward products purchased.

Life style is usually applied to marketing as a market segmentation base, a classification of consumers' behaviors, product positioning and advertising strategy (Wells 1971; Wind & Green, 1978). Nevertheless, some limitation of application in life style are not suitable for low involvement product, price sensitive product, Commodities and special products etc. (Frochot, 2005).

### 3. Research method

Content analysis is to screen pre-consumer information prior to making the purchase for relevant websites. It provides us in designing questionnaire of content of websites which are the service provided from internet vendors.

We conduct this study based on a sample of 199 which is using snowball and convenient sampling method in Taiwan. This research chose respondents who have experience of online shopping. The questionnaires sent out a total of 250 questionnaires for a specific time period. Among these 250 questionnaires, 199 were returned, because of 51 questionnaires were incompletely, the result was a total of 199 effective questionnaires accounting for 80% of total. The following information will be collected from this survey:

#### 1) *Emphasis on contents of websites*

There are total 26 questions which are different contents listing on different websites, including search mechanism, reply email address, order confirmed, different methods of payment, online booking, restrictions on members, customized service services, franchised, pictures of restaurants, basic introduction of restaurants, location map, menu illustration, ingredients and menu list. Measurement scale is based on Likert 5 point of degree from "very un-important (1)" to "very important (5)".

#### 2) *Emphasis of life Style (marketing segmentation)*

There are 15 questions which derived from AIO (activity, interest, interest) constructs (Kotler, 1997; Wind & Green, 1978). There are four questions included in activity construct. In construct, there are 6 questions included. Lastly, there are four questions included in opinion construct. Some of the original concepts of AIO are not suitable to describe consumers of Taiwan, therefore, we modify some questions according to ICP (Integrated Consumer Profile) of Taiwan.

The existing measurements scales were employed as tools to measure variables in ensuring confidence level and effectiveness. In addition, in-depth interviews were conducted with websites owners to correct the questionnaire content. Finally, a pretest of questionnaire was conducted to ensure the appropriateness of questionnaire design. The measurements of variables are described in table 1:

Content analysis is screening from 87 websites of (including all websites in personas) for contents analysis. We assume that these emphasizes on contents of websites consist of services factors, which are necessary to sustain order requirements for e-commerce. In other words, these factors are representing critical factors for a competitor to provide similar services to customers.

#### 4. Results

A factor analysis was conducted in accordance with websites contents and three constructs of AIO. Principle component analysis and Varimax were also employed to ascertain factors with eigenvalue of more than one and name factors based on factor loading with a value of more than 0.4.

##### *Factor analysis of websites contents*

In Table 2, it demonstrates the common factors for websites according to factors analysis. There are total 26 questions after eliminating 7 questions from original questionnaire in first factor analysis. Finally, we eliminate three questions out of a total 15 questions. We name factor 1 for customized service services, followed by factor 2, for menu illustration, factor 3 for safety of uses, and lastly, factor 4 for information of store itself.

##### *Factor 1: Customized Service*

This factor includes restrictions on members, customized service services and franchised. These characteristics refer to customized service services with a variance of 19.61 % at total Cronbach  $\alpha$  of 0.78

##### *Factor 2: Menu Illustration*

This factor includes ingredients, menu illustration and menu list. These characteristics refer to customized service services with a variance of 15.06 % at total Cronbach  $\alpha$  of 0.79.

Table 2

**Factors Analysis of Contents on Websites**

Factors Name	Questions	Factor Loading	Eigen-value	Explained variance%	Cumulative explained variance%	Cron. $\alpha$
Customized Services	restrictions on members	0.802	2.960	19.61	19.619	0.78
	customized service services	0.716				
	franchised	0.706				
Menu Illustration	ingredients	0.870	2.273	15.06	34.69	0.79
	menu illustration	0.806				
	menu list	0.727				
Safety of Use	different methods of payment	0.795	2.163	14.49	49.17	0.76
	orders confirmed	0.681				
	online booking	0.635				
Information of Store	pictures of restaurants	0.853	1.96	13.08	62.264	0.64
	basic introduction of restaurants	0.803				
	location map	0.780				

Table 3

Factors Analysis of AIO

Factors Name	Questions	Factor Loading	Eigen-value	Explained variance %	Cumulative explained variance%	Cron. $\alpha$
Activity	happy family	0.74	3.51	29.28	29.28	0.7
	valued by others	0.67				
	enjoy on excursion	0.67				
	enjoy on work	0.66				
Interest	willing to paid more on better service	0.77	1.40	11.68	11.68	0.8
	willing to paid more on better food	0.75				
	preference on taste than price	0.57				
	always try new products of food	0.5				
Opinion	believing on advertising	0.79	1.13	9.40	9.4	0.8
	celebrity's referral is reliable to them	0.69				
	dining on regular restaurant	0.57				
	better decoration of meal will appeal to them	0.43				

*Factor 3: Safety of use*

This factor includes different methods of payment, orders confirmed and online booking. These characteristics refer to safety of use with a variance of 14.49 % at total Cronbach  $\alpha$  of 0.76

*Factor 4: Store Information*

This factor includes pictures of restaurants, basic introduction of restaurants and location map. These characteristics refer to store information with a variance of 13.08 % at total Cronbach  $\alpha$  of 0.64.

*Factor analysis of AIO*

After conducting first factor analysis, we deduct three questions from total 15 questions, then, we name factors name as activities, interests and opinions.

*Factor 1: Activity*

This factor includes happy family, valued by others, enjoy on excursion and enjoy on work. These characteristics refer to activity with a variance of 29.28 % at total Cronbach  $\alpha$  of 0.7

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#### *Factor 2: Interest*

This factor includes “willing to paid more on better service”, “willing to paid more on better food”, “preference on taste than price” and “always try new products of food”. These characteristics refer to interest with a variance of 11.68 % at total Cronbach  $\alpha$  of 0.8.

#### *Factor 3: Opinion*

This factor includes believing on advertising, celebrity’s referral is reliable to them, dining on regular restaurant and better decoration on meal will appeal to them. These characteristics refer to opinion with a variance of 9.4 % at total Cronbach  $\alpha$  of 0.8.

#### *Cluster analysis of AIO*

Since constructs of AIO are one kind of measurements for market segmentation (Kotler, 1997), thus we conduct a cluster analysis, which segment personas market into four major clusters. The numbers of distribution for each cluster is in table 4.

Table 4

**Distribution of cluster**

Cluster	Sample	Percentage
1	38	38
2	52	52
3	53	53
4	56	56
<b>Total</b>	199	100

From Table 5, consumers are more valued on the opinion construct in cluster 1, followed by activity and interest respectively. For example, in this cluster (segment) consumers trust the advertising, particularly for celebrity’s referral while they dinning regular restaurants. On the same time, they emphasize on the appeal of food and less valued on interest and activity construct. Therefore, we name this segment as opinion followers.

In cluster 2, consumers seem have moderate valued on activity construct compared with other constructs. For example, they enjoy on family life and work, so we name it as conservatives.

Opinion leader is best described in cluster 3 as they highly value opinion construct compared with cluster 1.

Finally, consumers are always willing to try new food and be found of best taste of food, which usually will charges higher price in cluster 4. Therefore, we name it as challengers.

Table 5

Cluster characteristic- mean of factors score

Factor	Activity	Interest	Opinion
Cluster1- Opinion followers	0.52	0.31	1.38
Cluster 2 - Conservatives	0.53	-1.0	-0.22
Cluster 3 - Opinion leaders	-1.15	-0.12	7.28
Cluster 4 - Challengers	0.23	0.84	-0.79
F value	63.82	60.87	81.39
P value	0.000	0.000	0.000

*Variance analysis between contents on websites and market segment*

A variance analysis is to analyse correlation between emphasis on service factors of websites and segments of personas (see Table 6).

Table 6

Variance analysis between Emphasis on content of website and different segment of personas industry

	Source	SS	Df	MS	F	Sig.
Customized Services	Between Groups	15.22	3	5.07	5.39	0.001*
	Within Groups	182.71	194	0.94		
	Total	197.93	197			
Menu Illustration	Between Groups	21.72	3	7.24	8.06	0.000*
	Within Groups	174.36	194	0.90		
	Total	196.09	197			
Store Information	Between Groups	7.83	3	2.61	2.67	0.049
	Within Groups	189.75	194	0.98		
	Total	197.58	197			
Safety of Use	Between Groups	19.00	3	6.33	6.88	0.000*
	Within Groups	178.53	194	0.92		
	Total	197.53	197			

\* P < 0.001.

Customised service factors have significant influence of segments in personas Industry, the similar phenomenon exists on other factors of menu illustration and safety of use factors of websites. For example, vender should provide customized services to members only with secured on-line booking mechanism while provisions of flexible method of payment, etc. However, there is no strong influence between store information and market segments. The reason behind is probable due to store information is to a website and, therefore, this factor has no significant difference compared to other factors.



## 5. Conclusions

This paper tries to suggest a checklist of contents of website attracting to different segments of the personas industry to a vendor. Firstly, we conclude that AIO can be a base of market segment in personas industry. They are opinion followers, conservatives, Opinion leader and the challengers segment. Secondly, we suggest some important factors which are included of the customized services, the safety of use factors, the store information and the menu illustration. Finally, we also conclude that the first three important factors of websites have significant influences on market segments of personas industry except for the store information factor.

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